

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2019-227-E - ORDER NO. 2021-246
APRIL 13, 2021

IN RE: South Carolina Energy Freedom Act (House)	ORDER DIRECTING
Bill 3659) Proceeding Related to S.C. Code)	LOCKHART POWER
Ann. Section 58-37-40 Integrated Resource)	COMPANY TO MODIFY
Plans for Lockhart Power Company)	ITS 2020 INTEGRATED
)	RESOURCE PLAN

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (“Commission”) on the 2020 Integrated Resource Plan (“IRP”) filed by Lockhart Power Company (“Lockhart” or the “Company”) pursuant to S.C. Code Ann. § 58-37-40 (Supp. 2020). In May 2019, the South Carolina General Assembly passed the South Carolina Energy Freedom Act (“Act 62” or the “Act”) which, among other things, extensively amended the requirements for the Integrated Resource Plan. Prior to Act 62, Section 58-37-40 required that an electrical utility file its IRP, but did not allow for Commission review or Commission action related to the IRP. Section 58-37-40 now requires that the Commission establish a proceeding to review each electrical utility's IRP and issue a final order approving, modifying, or denying the plan within three hundred (300) days after it is filed. S.C. Code Ann. § 58-37-40(C)(1) (Supp. 2020). The proceeding shall permit a reasonable time for discovery and allow for intervention by interested parties. *Id.* Lockhart filed its 2020 IRP with Commission on June 17, 2020, and filed a revised Attachment 1 to

the IRP on July 20, 2020. The planning horizon for this IRP covers the fifteen (15) year period of 2020 through 2034.

II. PROCEDURAL HISTORY

By letter dated July 9, 2020, the Clerk's Office of the Commission instructed Lockhart to publish the Notice of Filing and Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation. The Notice indicated the nature of the proceeding and established an intervention deadline of August 28, 2020. Lockhart was required to publish the Notice on or before July 30, 2020, and provide proof of publication no later than August 28, 2020. Notice was published on July 27, 2020; proof of publication was filed on August 3, 2020. No person, corporation, or entity intervened as a party of record. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party of record pursuant to S.C. Code Ann. § 58-4-10(B) (Supp. 2020).

The evidentiary hearing was held virtually on December 8, 2020, with the Honorable Florence P. Belser presiding. Lockhart was represented by M. John Bowen, Jr., Esquire, and Margaret M. Fox, Esquire. ORS was represented by Jeff Nelson, Esquire, and Andrew M. Bateman, Esquire.

Lockhart presented the Direct and Rebuttal Testimony of Bryan Stone, P.E. ORS presented the Direct and Surrebuttal Testimony of Anthony Sandonato. ORS also presented the Direct Testimony of Samuel Wyrobeck, and the Direct and Surrebuttal Testimony of Philip Hayet, both of J. Kennedy and Associates, whom ORS engaged as consultants to review and analyze Lockhart's IRP. At the hearing, Hayet adopted the Direct Testimony of Wyrobeck.

III. EVIDENCE OF RECORD

a. Overview of Lockhart Power Company

Lockhart provides electricity to approximately 6,160 retail customers: approximately 4,900 residential customers, 1,250 commercial customers, and 8 industrial customers. Tr. p. 31.2, ll. 5-6. The Company serves rural portions of five (5) counties in Upstate South Carolina. Tr. p. 31.2, ll. 6-7; p. 36, ll. 6-10. Lockhart employs approximately fifty (50) people. Tr. p. 31.2, l. 19.

b. Lockhart's System

Lockhart is vertically integrated, having a 34 kilovolt (kV) sub-transmission station system, a distribution system, and generation resources. Tr. p. 16, ll. 1-4; p. 31.2, ll. 7-8. The Company has retail operations that are regulated by this Commission as well as parts of its business that are regulated by the Federal Energy Regulatory Commission. Tr. p. 16, ll. 8-10.

Lockhart's generation resources provide a minority of the Company's load. Tr. p. 31.2, ll. 8-9. For at least the last seventy-five (75) years, Lockhart has purchased the remainder of its power – over 70% of the Company's total energy requirements – from Duke Energy Carolinas, LLC ("DEC") under a full-requirements Purchase Power Agreement ("PPA"). Tr. p. 7, ll. 12-15; p. 31.2, ll. 9-10. Lockhart has native load status under the DEC PPA. Tr. p. 31.3, l. 20. This ensures a high level of reliability as DEC is obligated to ensure Lockhart's customers receive the same level of power supply reliability as DEC's own retail customers. Tr. p. 31.3, ll. 19-22. DEC is also contractually responsible to provide the amount of generation in real time necessary to meet Lockhart's load, regardless of the size of the load. Tr. p. 31.2, ll. 9-15; p. 31.4, ll. 18-20; p. 38, ll. 16-

18. Lockhart has four (4) physical interconnections with DEC's 100 kV transmission system. Tr. p. 31.2, ll. 15-17. At each of these locations, power is transformed down to the 34 kV sub-transmission level that Lockhart utilizes. *Id.* Lockhart's load peaks at 70-80 megawatts ("MW"). Tr. p. 31.3, l. 10. The Company's customer base is less than 1% of the size of other South Carolina investor-owned utilities ("IOUs"). Tr. p. 31.3, ll. 14-15.

c. Testimony Regarding Lockhart's 2020 IRP

The Company called Bryan Stone, President of Lockhart, as a witness. He testified regarding Lockhart's compliance with the statutory requirements of Section 58-37-40. According to Stone, the specific requirements set forth in the statute are very similar to the requirements that applied prior to its enactment, with the main difference being that Act 62 was intended to encourage and promote the adoption of renewable energy by IOUs. Tr. p. 14, ll. 16-20. Because Lockhart's generation is already 100% renewable, Stone testified that the Company has met the legislative intent of the changes to the IRP process contained in Act 62. Tr. p. 14, ll. 20-24.

Stone also testified to several key characteristics that make Lockhart unique among South Carolina's IOUs. First, the Company is very small. Other IOUs operating in South Carolina are more than one hundred (100) times the size of Lockhart. Tr. p. 16, ll. 16-22. Second, Lockhart has an unmatched renewable energy profile, with 100% of the power it generates coming from renewable resources. Tr. p. 16, ll. 23-25. Third, Lockhart meets its non-generated load requirement needs for serving its customers with purchases from DEC under a long-term PPA. Tr. p. 17, ll. 1-7.

According to Stone, these three (3) key differences have tremendous implications for Lockhart's IRP process. Tr. p. 17, ll. 8-10. For example, rather than having multiple resource portfolios representing different trajectories for renewable energy adoption that can be evaluated and compared to one another, Lockhart has a single base case that represents its actual resource portfolio. Tr. p. 17, ll. 15-16. There is no need for multiple scenarios because (1) Lockhart is already at the "best case" for adoption of renewable resources and (2) the DEC PPA ensures that Lockhart's load will be continuously balanced under any and all load scenarios. Tr. p. 17, l. 17 – p. 18, l. 8. Additionally, unlike other IOUs operating in South Carolina, Lockhart does not have aged fossil or other generation resources that will require replacement, which would be another reason to compare various resource portfolios. *Id.* While other utilities may consider various resource portfolios with lower or higher levels of carbon tax, solar, wind, or modular nuclear penetration, or earliest practical coal plant retirements, none of these concepts applies to Lockhart. *Id.* Thus, according to Stone, ORS's three (3) "Now" recommendations (discussed below), that remained unresolved as of the hearing date, are difficult to apply to Lockhart's unique situation. Tr. p. 19, l. 9 – p. 22, l. 14.

According to his testimony, Stone stated that the Company is willing to modify its 2020 IRP to include certain clarifications made in his Rebuttal Testimony, which would resolve a number of the issues raised by the ORS consultant:

- (1) Address ORS Recommendation 1 by including revised Attachments 2 and 3, as attached to Stone's Rebuttal Testimony (Hearing Exhibit No. 2), for various reasonable scenarios, including the addition of a new large industrial customer as described in his Rebuttal Testimony;

- (2) Address ORS Recommendation 2 (Item 3) to include some high-level language regarding how Lockhart evaluates prospective new generation resources (although the current IRP does not identify any such specific resources);
- (3) Address ORS Recommendation 4 (Item 5) to include a statement saying that Lockhart's renewable portfolio has negligible fuel cost and environmental risk, and that DEC's cost and risk (as they relate to Lockhart) will be evaluated in the context of the next DEC PPA renewal; and
- (4) Revise Attachment 1 to reflect that Lockhart does not intend to renew its PPA with DEC for the Wellford Landfill Gas facility when it expires at the end of 2020, but that Lockhart instead will use that power to directly serve customers.

Tr. p. 22, ll. 19-22; p. 33.12, l. 16 – p. 33.13, l. 7. The Company believes that the IRP, as so amended, would meet the statutory requirements as they apply to Lockhart's unique situation, and appropriately balance the various factors the Commission must consider. Tr. p. 22, l. 25 – p. 23, l. 9.

Regarding the five long-term recommendations made by ORS, Stone testified that, without weighing in on the appropriateness of the recommendations at this time, the Company agrees to consider those recommendations no later than in its next comprehensive IRP filing in 2023.

Anthony Sandonato is employed by ORS as a Senior Regulatory Manager. His Direct and Surrebuttal Testimony set forth and support the recommendations of ORS. ORS

retained the consulting services of J. Kennedy and Associates, Inc. to assist in the review and analysis of Lockhart's IRP. J. Kennedy and Associates prepared a report entitled: "Review of Lockhart Company's 2020 Integrated Resource Plan" (the "ORS" Report) which included findings, conclusions, and recommendations. The ORS Report was attached as Exhibit AMS-1 to Sandonato's Direct Testimony. Sandonato testified that, based on the ORS consultant's initial review, the Company did not comply with the statutory requirements of Section 58-37-40. Tr. p. 94.4, ll. 1-3. The ORS Report contains confidential information that the Company provided to ORS in response to numerous requests for the production of documents. The Commission entered the ORS Report into the record under seal as confidential Hearing Exhibit No. 3.

Philip Hayet is Vice President and Principal of J. Kennedy and Associates, Inc. He provided testimony that described the consultant's review of Lockhart's 2020 IRP. Hayet adopted the Direct Testimony of Samuel Wyrobeck from the stand. Hayet assessed the Company's compliance with the statutory requirements of Section 58-37-40, as amended by Act 62. Hayet acknowledged that there are key characteristics that distinguish Lockhart from other IOUs but stated that the South Carolina General Assembly did not include an exemption or waiver from the requirements of Act 62 based on a utility's size. Tr. p. 113, ll. 9-13. Hayet's Surrebuttal Testimony summarized the recommendations of ORS in table format, along with the status of each recommendation at the time of hearing.

i. The ORS Report

The ORS Report identifies ten (10) recommendations. *See* Hearing Exhibit No. 3 at pp. 5-6. The recommendations were related to the Company's long-term sales and peak demand forecasts, resource options available to meet their demand, resource portfolios

(“RP”), costs and risk sensitivities associated with the RPs, and short-term action plan. *Id.* ORS witness Hayet stated that the Company did not develop alternative resource portfolios, conduct risk evaluations, or provide portfolio cost estimates, which led to ORS’ overall conclusion that Lockhart had failed to comply with Section 58-37-40. Tr. p. 117.3, l. 20 – p. 117.4, l. 6. ORS’ recommendations were separated into two categories, with five (5) recommendations to be addressed “Now” by modifying the current IRP, and five (5) recommendations to be addressed “Later.” Tr. p. 117.5, ll. 6-15. ORS recognizes that the implementation and use of new modeling tools and methodologies may be more suitably addressed over a longer period of time and recommends that Lockhart incorporate the “Later” recommendations in the next annual IRP updates in 2021 and 2022, but no later than the next comprehensive IRP in 2023. *Id.*

The immediate recommendations identified by ORS witness Hayet that should be addressed in the 2020 IRP are provided in Table 1, along with the response by Lockhart to the recommendation. Tr. p. 119.4, l. 17 – p. 119.5. The third column provides the status between Lockhart and ORS concerning the recommendation based upon Lockhart’s Rebuttal Testimony and discovery responses. Tr. p. 119.4, ll. 17-22.

Table 1
Recommendations for this IRP

Item	Recommendations	Company Response	Status
1	The Company should develop long-term forecasts of sales and peak demand under various reasonable scenarios, which typically include low, medium, and high forecasts. 40(B)(1)(a)	LPC provided additional data to meet the requirements. LPC also made a correction to its load forecast and developed low, medium, and high forecasts.	Resolved.
3	The Company should develop several resource portfolios (low, medium, and high) to evaluate the range of demand-side, supply-side, storage and other technologies available to meet its load requirements. 40(B)(1)(b) and 40(B)(1)(c)	LPC states it met the requirements to the extent applicable to LPC, based on the fact that it is small, has a full-requirements contract with DEC, and has no requirement to add new resources.	Unresolved. No statutory exemptions exist.
4	The Company should include a more detailed discussion of Demand Side Management ("DSM") in its IRP, including the historically achieved and projected energy and peak impacts. 40(B)(1)(c)(i) and 40(B)(1)(i)	The Company committed that it would include detailed discussions regarding program impacts in future evaluations of energy efficiency and demand response programs.	Resolved. Request that Commission include LPC commitment in Commission Order.
5	The Company should include an evaluation of low, medium, and high fuel prices and environmental regulations (primarily CO ₂ costs) in order to evaluate its DEC PPA costs. 40(B)(1)(c)(iii)	LPC states it met the requirements to the extent applicable to LPC, based on the fact that it has a full requirements contract with DEC and has existing renewable resources.	Unresolved No statutory exemptions exist.
6	The Company should develop a method of conducting resource evaluations as part of its IRP to compare its proposed plan to other reasonable options under different load, fuel, and risk sensitivities. This is necessary in order to compare net benefits of different resource plans. 40(B)(1)(g), and 40(B)(1)(h)	LPC states it met the requirements to the extent applicable to LPC and that ORS believes LPC should evaluate "options that don't exist."	Unresolved. No statutory exemptions exist.

The longer-term recommendations identified by ORS witness Hayet that should be addressed as soon as possible, preferably in the next annual IRP update by Lockhart but not later than the Company's comprehensive 2023 IRP, are provided in Table 2, along with the response by Lockhart to the recommendation. Tr. p. 119.4, l. 17 – p. 119.5; Tr. p. 119.6. The status third column reflects the current status of each recommendation between Lockhart and ORS based upon Lockhart's Rebuttal Testimony and discovery responses. Tr. p. 119.4, ll. 17-22.

Table 2
Longer-Term Recommendations

Item	Recommendations	Company Response	Status
2	The Company should improve its load forecasting methodology. This includes developing documentation describing the energy and peak load forecast methodology and performing a statistically based analysis that uses historical LPC sales and load data, together with weather data to develop long term projections.	LPC states that it is challenging to develop a reasonable load forecast projection because of the disproportionate impact a single customer can have on LPC's load. However, the Company is willing to address this by the next comprehensive IRP.	Resolved Request that Commission include LPC commitment in Commission Order.
7	The Company should develop a three (3) year action plan that identifies all actions the Company intends to take in order to implement its IRP.	LPC states it is willing to address this by the next comprehensive IRP.	Resolved. Request that Commission include LPC commitment in Commission Order.
8	The Company should conduct analyses of the DEC PPA contract renewal.	LPC states it is willing to address this by the next comprehensive IRP.	Resolved. Request that Commission include LPC commitment in Commission Order.
9	The Company should consider the benefits of conducting a competitive solicitation process to evaluate alternatives to the DEC full requirements contract.	LPC states it may consider conducting a competitive solicitation and it is willing to address this by the next comprehensive IRP.	Resolved. Request that Commission include LPC commitment in Commission Order.
10	The Company should conduct analyses to determine if it should continue to sell some of its owned resources to another party, or if customers would be better off if those resources were used to serve native load.	LPC states it is willing to address this by the next comprehensive IRP.	Resolved. Request that Commission include LPC commitment in Commission Order.

With respect to the five “Now” recommendations, Sandonato testified that the Company addressed two (2) of those recommendations in Rebuttal Testimony, leaving three (3) recommendations for immediate consideration by the Commission. Tr. p. 96.3, ll. 5-8. In his Surrebuttal Testimony, Hayet provided the Commission with an update to the recommendations made in the ORS Report. Hayet testified that Recommendation 1 had been resolved, but that Recommendations 3, 5, and 6 remained unresolved as no statutory exemptions exist for Lockhart with regard to Section 58-37-40. Tr. p. 119.5. ORS’ Recommendations 3, 5, and 6 were that the Company’s 2020 IRP be revised to include: (3) several resource portfolios evaluating the demand- and supply-side

technologies available to meet Lockhart's load requirements; (5) an evaluation of low, medium, and high fuel and environmental regulation costs; and (6) a comparative cost analysis between the Company's proposed plan to other reasonable options under different load, fuel and risk sensitivities. *Id.* As to Recommendations 2, 4, 7, 8, 9, and 10 contained in the ORS Report, Hayet testified that these could all be considered as currently resolved, but that the Commission should require Lockhart to comply with these additional recommendations at some future date prior to or during the filing of its 2023 IRP. Tr. p. 119.4, ll. 5-10. Hayet included a new recommendation, number 11, in his Surrebuttal Testimony in which he specifically recommended that "(t)he Company should be required to file a supplemental IRP that includes all the revisions that it discussed in Rebuttal Testimony as well as the updated Attachments 2 and 3." Tr. p. 119.16, ll. 31-33. Sandonato echoed Hayet's sentiments. Tr. p. 96.3, ll. 11-13.

Through his Rebuttal Testimony, Stone responded to both the near and long-term recommendations made in the ORS Report and the Direct Testimony of Sandonato. Stone opined that the recommended additional steps or procedures were unnecessary as Lockhart had complied with all statutory requirements applicable to Lockhart due to its unique characteristics. In responding to ORS Recommendations 2, 7, 8, 9, and 10, Stone stated that the Company has agreed to consider, without weighing in on the appropriateness of the recommendations, the longer-term recommendations no later than the filing of its next comprehensive IRP in 2023. Tr. p. 33.12, ll. 9-15. Stone also testified in Rebuttal that Lockhart was willing to modify its current IRP to include clarifications, if necessary. Tr. p. 33.12, l. 16 – p. 33.13, l. 7. Stone believes simple language could be added to the current

IRP and its Attachments to address ORS Recommendations 3 and 5 and to address the addition of the Wellford Landfill Gas facility to its generation portfolio. *Id.*

IV. LAW

The Commission shall approve the electrical utility's IRP if it "represents the most reasonable and prudent means of meeting the electrical utility's energy and capacity needs as of the time the plan is reviewed." S.C. Code Ann. § 58-37-40(C)(2) (Supp. 2020). The Commission, in its discretion, shall consider whether the plan appropriately balances the following seven (7) factors:

- (a) resource adequacy and capacity to serve anticipated peak electrical load, and applicable planning reserve margins;
- (b) consumer affordability and least cost;
- (c) compliance with applicable state and federal environmental regulations;
- (d) power supply reliability;
- (e) commodity price risks;
- (f) diversity of generation supply; and
- (g) other foreseeable conditions that the commission determines to be for the public interest.

Id. Pursuant to S.C. Code Ann. § 58-37-40(B)(1) (Supp. 2020), an integrated resource plan shall include:

- (a) a long-term forecast of the utility's sales and peak demand under various reasonable scenarios;
- (b) the type of generation technology proposed for a generation facility contained in the plan and the proposed capacity of the generation facility, including fuel cost sensitivities under various reasonable scenarios;
- (c) projected energy purchased or produced by the utility from a renewable energy resource;

- (d) a summary of the electrical transmission investments planned by the utility;
- (e) several resource portfolios developed with the purpose of fairly evaluating the range of demand-side, supply-side, storage, and other technologies and services available to meet the utility's service obligations. Such portfolios and evaluations must include an evaluation of low, medium, and high cases for the adoption of renewable energy and cogeneration, energy efficiency, and demand response measures, including consideration of the following:
 - i. customer energy efficiency and demand response programs;
 - ii. facility retirement assumptions; and
 - iii. sensitivity analyses related to fuel costs, environmental regulations, and other uncertainties or risks;
- (f) data regarding the utility's current generation portfolio, including the age, licensing status, and remaining estimated life of operation for each facility in the portfolio;
- (g) plans for meeting current and future capacity needs with the cost estimates for all proposed resource portfolios in the plan;
- (h) an analysis of the cost and reliability impacts of all reasonable options available to meet projected energy and capacity needs; and
- (i) a forecast of the utility's peak demand, details regarding the amount of peak demand reduction the utility expects to achieve, and the actions the utility proposes to take in order to achieve that peak demand reduction.

V. DISCUSSION

a. Background on Integrated Resource Planning

Integrated Resource Planning is a structured, transparent process for comparing options to meet electric demand. It was introduced in the electric sector in the 1980s, has been widely adopted across the US, and continues to play a key role today in most states. IRP serves a unique and vital purpose within utility regulation in that it provides a way to comprehensively and systematically consider the wide array of factors that impact electric system choices. When implemented prudently, IRP can save ratepayers billions of dollars, help regulators understand risk exposure and make decisions that align with their risk

preferences, improve environmental outcomes, and facilitate stakeholder buy-in for utility plans. It is a powerful tool but must be implemented carefully to provide these benefits. The Legislature, in passing Act 62, significantly strengthened the IRP process in South Carolina. Compared to the previous IRP statute, Act 62 includes an expanded and more detailed list of requirements for utility IRP filings. Act 62 also enabled formal Commission review of utility plans via a litigated proceeding, in which the Commission must ultimately accept, reject, or order modifications to the utility's proposal. These statutory changes signal both the heightened importance the South Carolina General Assembly has assigned to IRP and also the critical role assigned to this Commission in reviewing and ruling on proposed utility plans. As commonly implemented, the IRP process involves five basic steps: (1) forecast future electricity demand; (2) identify the goals and regulatory requirements the process must meet; (3) develop a set of resource portfolios designed to achieve those goals; (4) evaluate those resource portfolios; and (5) identify a preferred resource plan.

b. History of Lockhart's Integrated Resource Planning

The Commission required jurisdictional electric utilities to file their first IRP beginning in September 1989. A more formal IRP process was approved in October 1991. Under the more formal process, all electric utilities were required to file detailed IRPs every three (3) years and a short term action plan in the intervening years. In 1993, the Commission focused specifically on IRP requirements for Lockhart and explained:

It was brought to the Commission's attention that Lockhart presented a unique situation for the development of an integrated resource plan. Among other things, Lockhart purchases 80% of its power from Duke Power Company. Essentially, Lockhart has unique problems. The Commission agreed that Lockhart presented a unique situation, and therefore authorized

the opening of [Docket 93-430-E] to establish a procedure, and subsequently examine an IRP strictly for Lockhart [Power] Company.

Order No. 93-950, Docket No. 93-430-E (October 14, 1993). Among other things, Order No. 93-950 required Lockhart's IRP to include: (1) the evaluation of the cost effectiveness of each supply-side and demand-side option; (2) consideration of the environmental costs of the plan; (3) a demand and energy forecast; (4) a discussion of maintenance and refurbishment programs for existing generating units; and (5) evaluation and review of existing demand-side options utilized by the utility as well as discussion of future demand-side and/or supply-side options. *Id.* The Commission ordered Lockhart to file a fifteen (15) year IRP every three (3) years, but the Company was not required to file a short term action plan in the intervening years. *Id.*

The Commission approved Lockhart's initial IRP on April 21, 1994, finding that the IRP constituted a good faith and reasonable effort by the utility to comply with the Commission's IRP process, given the Company's "existing constraints such as its limited size, its operating characteristics, and its limited resources." Order No. 94-348, p. 4, ¶¶ 1-3, Docket No. 93-430-E (April 21, 1994).

c. Commission Decision

Pursuant to S.C. Code Ann. § 58-37-40(C)(2) (Supp. 2020), the Commission modifies the 2020 IRP as filed by Lockhart and requires the utility to file a Modified 2020 IRP, as detailed below, within sixty (60) days of the final Order. S.C. Code Ann. § 58-37-40(C)(3) (Supp. 2020). The Commission believes that Lockhart's IRP, with the modifications described herein, represents the most reasonable and prudent means for Lockhart to meet its energy and capacity needs. The Commission further believes that the

modifications set forth in this Order are consistent with the intent and purpose of the General Assembly.

ORS advanced the position that the Company did not “examine alternative resource portfolios to meet its long-term resource needs in a least cost, reliable manner.” Tr. p. 119.3, ll. 15-16; p. 119.9, ll. 21-22. However, according to Lockhart, there are a number of good reasons for the Company to present a single base case, rather than multiple alternative resource portfolios. While Lockhart acknowledges that the statute applies to the Company in certain specific areas, Lockhart also asserts that the statute cannot be applied to Lockhart in the same way that it is applied for South Carolina’s traditional, larger IOUs.

Lockhart explains that its unique characteristics make it different from other IOUs operating in South Carolina. Hayet, the ORS consultant, repeatedly concedes that Lockhart is a distinct IOU. *See* Tr. p. 114, ll. 17-19 (“[w]hile I recognize that load forecasting may be challenging for a utility the size of Lockhart”); Tr. p. 129, l. 18 (“I grant you the company is small . . . and we get that resources are limited”); Tr. p. 135, ll. 20-21 (“we recognize there are characteristics that are different”); Tr. p. 136, ll. 20-21 (“the Commission must consider the characteristics they are pointing out; the size, the staffing level. There is an issue.”); Tr. p. 140, ll. 11-12 (“We’ve recognized that Lockhart is small, they’ve got the PPA, they’ve done renewables.”); and Tr. p. 142, ll. 17-25; (Lockhart is “in a category all by themselves.”) The Commission acknowledges the same. Lockhart is very small – less than 1% of the size of other South Carolina IOUs. Lockhart’s small size means that it cannot cost-effectively provide a diversified generation portfolio to serve and balance its entire load. Instead, the Company historically has used the long-term, full-requirements While the Commission does recognize that Lockhart has unique

characteristics which can present challenges in the IRP process, the Commission also recognizes that Lockhart is willing to modify its 2020 IRP to include these requested clarifications. Tr. p. 33.3, ll. 10-11. First, Lockhart shall revise Attachments 2 (Peak Demand Forecast) and 3 (Sales Forecast), as attached to Bryan Stone’s Rebuttal Testimony (Hearing Exhibit No. 2), to show light load and high load alternative forecasts for various reasonable scenarios, including the addition of a new large industrial customer. See, Tr. p. 33.4, l. 5 – Tr. 33.5, l. 17.

Second, Lockhart shall modify its 2020 IRP to include some high-level language regarding how Lockhart evaluates prospective new generation resources. The Commission finds that the statutory requirement should also apply to the Company’s current resource portfolio. Lockhart witness Stone testified that the Company generates 100% of the energy from its own resources using renewables, so it has achieved the statutory “high case” for the adoption of renewable energy, and it would not consider going backward toward a low or medium case. Tr. p. 33.8 ll. 18-21. Stone further testified that Lockhart “has increased the number of its renewable energy facilities serving retail load prior to its last rate case in 2013, and implemented demand-side management to the extent it has identified economic opportunities to do so. Due to [Lockhart’s] small size and PPA restrictions, these opportunities are rare.” Tr. p. 33.8, ll. 5-9. Stone explained that Lockhart does continually monitor solar generation market changes, including declining prices in the cost of solar and battery storage and keeping its limited options open regarding new solar resources; however, there were no current plans by Lockhart to add any individual resources to serve Lockhart’s retail load. Tr. p. 33.8, ll. 9-13. Stone stated that Lockhart had “not identified

any specific projects that meet its high-level screening requirements to merit inclusion in its IRP.” Tr. 33.9, ll. 2-3. See, Tr. p. 33.5, l. 18 – p. 33.8, l. 16.

Lockhart has acquired renewable resources which make up 100% of the Company’s own generation and Lockhart has implemented DSM. The Commission concludes that there is value for the electric utility to evaluate alternatives, which is a goal of an IRP. While Lockhart is unique in size, there are scenarios that Lockhart Power could evaluate in the context of an IRP, including the possibility of acquiring some solar and energy-storage resources; implementing energy-efficiency programs; determining if certain renewable sales contracts should be extended, which the company will have to do in the very near future; and evaluating alternatives to the Duke full-requirements contract.

Third, Lockhart shall further modify its 2020 IRP to include a statement that Lockhart’s renewable portfolio has negligible fuel cost and environmental risk, and that Duke’s cost and risk (as they relate to Lockhart) will be evaluated in the context of the next Duke PPA renewal. This requirement should apply to the Company’s current resource portfolio. The Commission adopts the position of ORS regarding this requirement. See, Tr. p. 33.10, l. 1 – p. 33.11, l. 7; Tr. p. 33.11, l. 13 – p. 33.12, l. 5.

Fourth, Lockhart shall modify its 2020 IRP by revising Attachment 1 to its filed 2020 IRP to reflect that Lockhart does not intend to renew its Power Purchase Agreement (PPA) with Duke for the Wellford Landfill Gas facility, but that Lockhart instead will use that power to directly serve customers. See, Tr. p. 33.11, ll. 8-12.

We agree with Hayet that Lockhart can and should do more to explain how its base case scenario represents the “least cost” scenario. A large part of that analysis relates to the DEC PPA, which is in effect through the end of 2028. Lockhart does not dispute that

alternatives to the DEC PPA should be considered and evaluated at the appropriate time. However, the Company states any analysis conducted eight (8) years before the contract expires would be premature and have little value. Tr. p. 33.8, ll. 15-16. The Commission agrees. Therefore, no later than the next comprehensive IRP filing in 2023, Lockhart should consider and evaluate alternatives to the DEC PPA.

ORS recommends, and Lockhart has agreed to develop a three-year Action Plan no later than the next comprehensive IRP filing in 2023. The Commission, however, deviates from this recommendation and requires Lockhart to file a high-level three-year Action Plan beginning with the 2021 IRP Update and continuing for each subsequent year thereafter. The Action Plan should identify all actions the Company intends to take in order to implement its IRP. The Action Plan may be performed in-house or with minimal outside consulting.

VI. FINDINGS OF FACT

1. Lockhart is an electrical utility as defined in S.C. Code Ann. § 58-27-10(7) (Supp. 2020).
2. Lockhart is a small investor-owned utility operating in South Carolina. It has approximately 6,100 customers, approximately 50 employees, and its peak load is 70-80 MW.
3. One hundred percent (100%) of the power generated by Lockhart comes from renewable resources.
4. Lockhart purchases over seventy (70%) of the power needed to serve its load through a full-requirements PPA with DEC, which it has done for decades. The current DEC PPA expires at the end of 2028.

5. S.C. Code Ann. § 58-37-40, as amended by Act 62, requires electrical utilities to prepare and file integrated resources plans with the Commission at least once every three years. *See* S.C. Code Ann. § 58-37-40(A)(1) (Supp. 2020).

6. Lockhart's IRP as filed does not meet the requirements of S.C. Code Ann. § 58-37-40 (Supp. 2020).

7. As discussed herein, we find Lockhart should modify its 2020 IRP by (a) revising Attachments 2 and 3 for various reasonable scenarios, including the addition of a new large industrial customer as described by Witness Stone in his rebuttal testimony Tr. p. 33.4, l. 5 – Tr. p. 33.5, l. 17; (b) including language or description regarding how Lockhart evaluates prospective new generation resources, Tr. p. 33.5, l. 18 – p. 33.8, l. 16; (c) including a statement that Lockhart's renewable portfolio has negligible fuel costs and environmental risk and that Duke's cost and risk, as related to Lockhart, will be evaluated in the context of the next Duke IRP, Tr. p. 33.10, l. 1 – p. 33.11, l. 7; Tr. p. 33.11, l. 13 – p. 33.12, l. 5; and (d) revising Attachment 1 to the 2020 IRP to reflect that Lockhart does not intend to renew its PPA with Duke for the Wellford Landfill Gas facility but that Lockhart will use that power to directly serve customers. Tr. p. 33.11, ll. 8-12.

8. We find that Lockhart shall include a three-year high-level action plan in its 2021 update to the IRP and each subsequent update thereafter and that the action plan may be developed in-house or with minimal outside consulting work.

9. We find that Lockhart shall examine and review the PPA renewal with Duke in its next comprehensive IRP filed in 2023 and shall come up with a written plan for acceptable alternatives. *See* Tr. pp. 140-41.

10. We find it appropriate for Lockhart to include the following long-term modifications recommended by ORS in its next comprehensive IRP update in 2023: (a) a more detailed explanation of its efforts to ensure its plan represents the least cost-alternative for its customers; (b) evaluation and consideration of alternatives to the Duke PPA; and (c) incorporation of renewable energy, demand-side, and energy-efficient programs for its customers in Lockhart's portfolio and a determination whether these programs can be accomplished through to Duke PPA.

11. The Commission finds that Lockhart's 2020 IRP shall be modified as provided herein.

VII. CONCLUSIONS OF LAW

1. The Commission concludes that South Carolina Code Section 58-37-40, as amended, means the final and approved Integrated Resource Plan of the electric utility must provide the "most reasonable and prudent means of meeting the electrical utility's energy and capacity needs as of the time the plan is reviewed." S.C. Code Ann. § 58-37-40(C)(2) (Supp. 2020).

2. The Commission concludes that South Carolina Code Section 58-37-40, as amended, provides seven (7) factors for the Commission to consider in the evaluation of the resource plans in the Lockhart IRP. Those (7) factors are as follows:

- a. resource adequacy and capacity to serve anticipated peak electrical load, and applicable planning reserve margins;
- b. consumer affordability and least cost;
- c. compliance with applicable state and federal environmental regulations;

- d. power supply reliability;
- e. commodity price risks;
- f. diversity of generation supply; and
- g. other foreseeable conditions that the commission determines to be for the public.

3. The Commission concludes that it is within its discretion to consider and balance the statutory factors in determining whether a proposed IRP represents the most reasonable and prudent means of meeting the electrical utility's energy and capacity needs at the time it is filed. See S.C. Code Ann. § 58-37-40(C)(2).

4. The Commission concludes that "the submission, review, and acceptance of an integrated resource plan ("IRP") by the Commission, or the inclusion of any specific resource or experience in an accepted integrated resource plan, shall not be determinative of the reasonableness or prudence of the acquisition or construction of any resource or the making of any expenditure." S.C. Code Ann. § 58-37-40(C)(4) (Supp. 2020).

5. The Commission concludes that "the electrical utility shall retain the burden of proof to show that all of its investments and expenditures are reasonable and prudent when seeking cost recovery in rates." S.C. Code Ann. § 58-37-40(C)(4) (Supp. 2020).

6. The Commission concludes that there is value for the electric utility to evaluate alternatives, which is a goal of an IRP.

7. The Commission concludes that Lockhart shall file its revised 2020 IRP with the modifications described herein, within sixty (60) days of receipt of this Order as required by S.C. Code Ann. § 58-37-40(C)(3) (Supp. 2020).

VIII. ORDERING PROVISIONS

IT IS THEREFORE ORDERED THAT:

1. Based upon Lockhart's 2020 IRP, the testimony, and exhibits received into evidence at the hearing and the entire record of the proceedings, the Commission hereby adopts each and every Finding of Fact and Conclusion of Law enumerated herein.

2. The Commission determined and found that Lockhart shall modify its 2020 IRP.

3. Lockhart shall file a Modified 2020 IRP, modified consistent with the directives in this Order within sixty (60) days of the final order in accordance with S.C. Code Ann. § 58-37-40(C)(3) (Supp. 2020).

4. The Modified 2020 IRP shall be a complete, stand-alone document.

5. The currently scheduled filing dates for Lockhart's 2021 IRP Update are held in abeyance and a new filing date for Lockhart's next IRP Update shall be set by the Commission following the Commission's final approval of the Modified 2020 IRP.

6. In its Modified 2020 IRP, Lockhart shall:

a. Revise Attachments 2 and 3, as attached to Bryan Stone's Rebuttal Testimony, for various reasonable scenarios, including the addition of a new large industrial customer as described in his Rebuttal Testimony.

b. Include high-level language regarding how Lockhart evaluates prospective new generation resources.

c. Include a statement that Lockhart's renewable portfolio has negligible fuel cost and environmental risk, and that DEC's cost and risk (as they relate to Lockhart) will be evaluated in the context of the next DEC PPA renewal.

d. Revise Attachment 1 to the 2020 IRP to reflect that Lockhart does not intend to renew its PPA with DEC for the Wellford Landfill Gas facility, but that Lockhart will instead use that power to directly serve customers.

7. In its 2021 IRP Update and subsequent annual Updates prepared pursuant to S.C. Code Ann. § 58-37-40(D)(1) (Supp. 2020), Lockhart shall develop a three-year high-level Action Plan. The three-year Action Plan shall identify and describe steps Lockhart will take to implement its IRP during that three-year period, including but not limited to additional analyses and evaluation and consideration of alternatives to the DEC PPA. Lockhart may be or is allowed to develop the Action Plan in-house or with minimal outside consulting.

8. Beginning with its 2023 IRP and continuing with subsequent, comprehensive IRPs prepared pursuant to S.C. Code Ann. §58-37-40(B)(1) (Supp. 2020), Lockhart shall:

a. Develop several resource portfolios (low, medium, and high) in order to evaluate the range of demand-side, supply side, storage and other technologies available to meet its load requirements in accordance with the provisions of S.C. Code Ann. §58-37-40(B)(1)(b) and 40(B)(1)(e).

b. Include an evaluation of low, medium, and high fuel prices and environmental regulations (primarily CO₂ costs) in order to evaluate its DEC PPA costs in accordance with S.C. Code Ann. §58-37-40(B)(1)(e)(iii).

c. Develop and provide a method of conducting resource evaluations as part of its IRP to compare its proposed plan to other reasonable options under different load, fuel, and risk sensitivities. This evaluation is necessary in order to

have the Company compare, and propose to the Commission, the net benefits of different resource plans in accordance with the provisions of S.C. Code Ann. §58-37-40(B)(1)(g) and 40(B)(1)(h).

d. Provide a more detailed explanation of its efforts to ensure its plan represents the least-cost alternative for its customers.

e. Evaluate and consider alternatives to the DEC PPA.

f. Incorporate renewable energy, demand-side, and energy-efficient programs for its customers in its portfolio and a determination as to whether this can be accomplished through the DEC PPA.

This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:



A handwritten signature in blue ink, appearing to read "Florence P. Belser", is written over a horizontal line.

Florence P. Belser, Vice Chairman
Public Service Commission of
South Carolina